

ABSTRACT

A gas turbine has a cooling air system supplying
air for cooling a high temperature part of the gas
5 turbine and a spray air system supplying air for
spraying fuel into a combustor and is formed so that a
part of high-pressure air compressed by a gas turbine
compressor is used as air of the cooling air system
and spray air system, wherein a heat exchanger and a
10 boost compressor are arranged downstream of the outlet
of compressed air of the gas turbine compressor, and
the boost compressor is composed of a parallel
connection of a compressor driven by the turbine shaft
and a compressor driven by a driven source other than
15 the turbine shaft, and pressurized air from the boost
compressor is used as air for the cooling air system
and the spray air system.

Selected Figure: Fig. 1

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